

**Notice of Allowability**

Application No.

10/713,817

Examiner

Geoffrey S. Evans

Applicant(s)

TROITSKI, IGOR

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 17 December 2004.
2. ☒ The allowed claim(s) is/are 1,3-5,9 and 13-19.
3. ☒ The drawings filed on 03 November 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

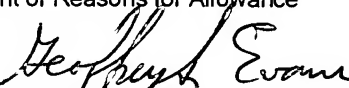
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20050415.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Geoffrey S. Evans  
Primary Examiner  
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### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 1:

On line 1 change "Method" to - - A method - -.

On line 4 change "the said" to - - the - -.

On line 5 change "these points" to -- - the points - -.

In claim 3:

On line 4 change "these regions" to - - the regions - -.

In claim 16:

On line 1 after "holograms" insert - - inside transparent materials - -.

On line 3 after "of" insert - -an- -.

On line 4 before "given" insert - - to a - -.

On line 6 after "into" insert - - an - - and change "these" to - - the - -.

On line 7 change "high" to - - a high - -.

On line 8 change "split of " to - - split of the - -.

On line 9 change "laser" to - - a laser - -.

On line 12 change "these points" to - - the points - -.

In claim 17:

On line 2 change "wave length" to - - wavelength- -  
and change "needed" to - - demanded- -.

In claim 18:

On line 2 change "the said" to - - the- -.  
On line 3 change "the second (or high) harmonic"  
to - - a second or higher harmonic - -.

In claim 19:

On line 2 change "Nd- YAG" to - - ND:YAG - - .

In the specification:

On page 9

on the next line after line 3 insert the following heading:

- BRIEF DESCRIPTION OF THE DRAWING- -.

- On the following lines insert:
- - - Figure 1 is an exemplary block-diagram of a laser-computer system of the invention for production of holograms by an arrangement of laser induced damages. - - .

On page 18:

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On line 15 change "computer system" to - - computer system (1) - -.

On line 16 change "object;" to - - object(5); - -.

On line 17 change "computer system" to - - computer system (2) - -.

On line 20 change "material;" to - - material (6); - -.

On page 19:

On line 1 change "laser system" to - - laser system(3) - -.

On line 3 change "optical and moving systems"

to - - optical system(4) and moving system(7) - -.

2. The following changes to the drawings have been approved by the examiner: to identify the elements shown in the drawings to coincide with the examiner's amendment to pages 18 and 19 of the specification. In order to avoid ABANDONMENT of the application, applicant must make the above drawing changes.

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The examiner's amendment to the claims were made to improve clarity, and not to effect the scope of the claims.

The page labeled "DESCRIPTION OF THE DRAWING" received 11/03/2004 was not entered into the specification since there were no instructions on where it should be placed. It was labeled as applicant's arguments in the Image file wrapper.

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3. The following is an examiner's statement of reasons for allowance: Regarding claims 1,3-5,13-15, none of the references of record discloses or suggests, alone or in combination, " A method for producing laser-induced holograms inside transparent materials by using laser-induced damages comprising: calculation of an interference pattern, corresponding to a given object; transformation of the interference pattern into an arrangement of points so that laser induced damages created at the points are able to reconstruct a high quality holographic image; ..." . Regarding claim 9, none of the references of record discloses or suggests, alone or in combination, "A method for production of small laser-induced damages comprising: determination of functional dependence of damage sizes from sizes of focal point for given transparent material; determination of focal point sizes corresponding to damage sizes; transformation of laser radiation so that it has the wavelength corresponding to demanded damage sizes; ...". Regarding claims 16-19, none of the references of record discloses or suggests, alone or in combination, "a first computer system for calculation of an interference pattern, corresponding to a given object; and a second computer system for transformation of the interference pattern into an arrangement of points, so that laser-induced damages, created at the points, are able to reconstruct a high quality holographic image without internal split of the transparent material" ... .

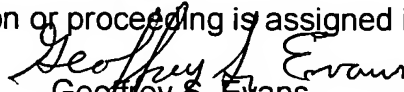
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571)-272-1171. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

GSE

  
Geoffrey S. Evans  
Primary Examiner  
Group 1700